Listing of Claims

1. (Currently amended) A method for identifying a compound that inhibits angiogenesis, the method comprising:

assaying *in vitro* kinase activity of an Axl polypeptide comprising an amino acid sequence with greater than about 95% identity to full length SEQ ID NO: 4 in the presence of the compound, wherein the Axl polypeptide has kinase activity in the absence of said compound;

performing a cell-based assay in an endothelial cell comprising said Axl polypeptide in the presence of the compound, which assay produces an angiogenesis phenotype selected from the group consisting of $\alpha v\beta 3$ expression, tube formation, and haptotaxis in said endothelial cell in the absence of the compound; and

identifying a compound that inhibits the *in vitro* kinase activity of the Axl polypeptide and that inhibits the angiogenesis phenotype in the cell-based assay,

wherein inhibition of the *in vitro* kinase activity of the Axl polypeptide in the presence of the compound and inhibition of the angiogenesis phenotype in the cell-based assay in the presence of the compound identifies the compound as a compound that inhibits angiogenesis.

2-13. (Canceled)

- 14. (Previously presented) The method of claim 1, wherein the polypeptide is recombinant.
- 15. (Previously presented) The method of claim 1, wherein the compound is an antibody.
- 16. (Previously presented) The method of claim 1, wherein the compound is an antisense molecule.
- 17. (Previously presented) The method of claim 1, wherein the compound is an RNAi molecule.

18. (Previously presented) The method of claim 1, wherein the compound is a small organic molecule.

19-26. (Canceled)

27. (Currently amended) An *in vitro* method for identifying a compound that inhibits angiogenesis, the method comprising:

contacting the compound with an endothelial cell that expresses a recombinant Axl polypeptide comprising an amino acid sequence with greater than about 95% identity to full length SEQ ID NO: 4, wherein the Axl polypeptide has kinase activity in the absence of said compound;

performing a cell-based assay, which assay produces an angiogenesis phenotype selected from the group consisting of $\alpha v \beta 3$ expression, tube formation, and haptotaxis in said endothelial cell in the absence of the compound; and

identifying a compound that inhibits the angiogenesis phenotype in the cell-based assay, wherein inhibition of the angiogenesis phenotype in the cell-based assay in the presence of the compound identifies the compound as a compound that inhibits angiogenesis.

28-40. (Canceled)

- 41. (Previously presented) The method of claim 27, wherein the compound is an antibody.
- 42. (Previously presented) The method of claim 27, wherein the compound is an antisense molecule.
- 43. (Previously presented) The method of claim 27, wherein the compound is an RNAi molecule.
- 44. (Previously presented) The method of claim 27, wherein the compound is a small organic molecule.

45-53. (Canceled)

- 54. (Previously presented) The method of claim 1 or 27, wherein the Axl polypeptide comprises SEQ ID NO: 4.
- 55. (Previously presented) The method of claim 1, wherein inhibition of the angiogenesis phenotype in the cell-based assay is caused by down regulation of expression of the Axl polypeptide.

56-63. (Canceled)